

# PDAM KOTA BANDUNG

## TARIFF ADJUSTMENT PROPOSAL - 2006



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The Office of Municipal Water Company of Bandung Municipality.

# PDAM KOTA BANDUNG

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# PREFACE

Dear Sir or Madam,

In reference with tariff adjustment plan of PDAM Kota Bandung in 2006, we hereby extend the Proposal on 2006 Clean Water Tariff.

This proposal is prepared to expose drinking water tariff adjustment plan of PDAM Kota Bandung for 2006 and the factors that form the background thereof. The proposal begins with elaboration of general performance of PDAM since 2003, both technical and financial, including constraints encountered by PDAM. The proposal will also explain the 2006 tariff adjustment calculation basis, and service recovery and improvement plans and the relations thereof to the tariff adjustment.

We extend the proposal as a consideration basis for the purpose of clean water tariff adjustment of PDAM Kota Bandung. Thank you for your attention and cooperation.

Bandung, May 15, 2006

H. M. Budiman  
*President Director*



# I. INTRODUCTION

## I.1. BACKGROUND

PDAM (Regional Water Company) Kota Bandung is a company of Bandung Municipal Administration that provides clean water and dirty water services for the people of Bandung and its surroundings.

As a company, in implementing its function to provide service for the people, PDAM Kota Bandung must earn sufficient cash income or revenue to cover cash cost and cash expenses incurred, such as payments for operational and maintenance expenses, interest cost and principal past due, capital goods expenditure (including for rehabilitation), and contribution to Regional Income (PAD).

Operational income or revenue of PDAM Kota Bandung originates from water revenues that consist of water tariff revenue and fixed charges, and non water revenues that consist of new connection fees, penalty, and others. In addition, PDAM also receives waste water revenue. Revenues from water tariff and fixed charges are the largest portions of total operational revenues. For the last three years, revenues from water tariff and charges have contributed about 78% of total revenues. Meanwhile, non water revenues range from 3%. Waste water revenue (that is 30% of water revenues) has contributed 19% of total operational revenues.

In the 2003 – 2005 period, the number of clean water customers decreased by 0.46%, from 143,669 in 2003 to 143,003 in 2005. As part of its service improvement plan, PDAM had to shut down connections that did not get water, and/or that did not pay the bills.

In line with this matter, total water sold only increased by 0.07%, whereas revenue from water sale only increased by 1.00% within the same period. The growth of water revenues was caused more by reclassification of customer performed by PDAM in 2005, not due to tariff adjustment or increase in the number of customers. It is also apparent that the growth of total operational revenues by 1.75% within the period of 2003 – 2005 was caused more by that of non water revenues amounting to 14.02% within the same period.

**Table I Growth of Water & Operational Revenues**

	<b>2003 - 2005</b>
Total Connections	-0.46%
Water Sold	0.07%
Water Revenues	1.00%
Non Water Revenues	14.02%
<b>Total Operational Revenues</b>	<b>1.75%</b>
<b>Total OM Expenditure</b>	<b>16.33%</b>

Meanwhile, in the 2003 - 2005 period, the growth of cash operational expenses was generally higher than that of operational revenues. Cash operational expenses increased by 16.33%, far exceeding the growth of water revenues and total operational revenues that were only 1.00% and 1.75% respectively.

Although the data indicated that raw water cost, and in particular, bad debt expenses, significantly decreased during the 2003 - 2005 period, considerable growth of GA, chemicals, maintenance, labour, and electricity costs, made the increase in cash operational expenses remain high.

It is apparent that slow growth of operational revenues could not compensate for rapid growth of cash operational expenses. Inflation growth during the 2002 -2005 period that was among others triggered by the increase in fuel price and power tariff, was the main cause of incapability of water revenues to cover PDAM's operational expenditures.

## **1.2. TARIFF ADJUSTMENT NEED**

The above explanation describes that the existing clean water tariff could not cover operational and maintenance expenses, long-term debt payment (interest cost and principal payment), and investment cost for recovery and service improvement. The increase in clean water tariff in 2001 could not compete with the inflation rate during the 2002 – 2005 period, which was among others triggered by the increase in fuel price and power tariff during this period.

It is apparent that PDAM is not in Full Cost Recovery (FCR) condition yet. The profits earned during the 2003 – 2005 period resulted from PDAM's failure to fully pay its long-term debt, not due to PDAM's capability to generate income that can cover its expenditures, including operational and maintenance expenses, depreciation costs, interest costs, and principal payment. The recent reclassification of customers only slightly increased water revenues, thus operational revenues. Efficiency improvement during the 2003 – 2005 period, such as decrease in personnel costs, decrease in bad debt expenses, and others, could not slow the growth of operational expenses down.

Failure to fulfill its operational expenses and long-term debt payment optimally made PDAM incapable of implementing the recovery and service improvement plans. The plan includes, among others, increase the number of new connections, capacity increase in Dago Bengkok and Cimenteng areas, and waste water service development.

PDAM has taken several efforts to increase revenues and to limit its operational expenses growth, but the efforts have not generated any expected results. Meanwhile, at the same time, PDAM must immediately recover its technical/operational and financial condition in order to improve its service to the community. PDAM is also expected to meet its debt service obligation, in terms of full payment of its scheduled interest and principal payments.

The situations and conditions encountered by PDAM implied that PDAM should take several technical and financial improvement actions. Therefore, PDAM Kota Bandung planned to have fixed charge and tariff adjustments in 2006.

In order to attain the objectives effectively, tariff adjustment must be based on several basic principles, such as:

1. *Cost Recovery:*  
That the fixed drinking water tariff should generate income that the minimum value thereof can cover the entire operational expenses, or full cost recovery, where average tariff is equivalent with principal cost, assuming that PDAM will be able to defend and improve quantity, quality, further service continuity, and generate sufficient operational profit for investment and contribution to the Original Regional Revenue as dividend return on equity of the Regional Administration.
2. *Affordability:*  
That all groups of community, particularly household customers, must be able to afford the tariffs in order to fulfill their basic needs. Therefore, the tariffs are divided into different classes according to their affordability level, and imposed by cross subsidy from strong to weak economy classes.
3. *Water Use Efficiency:*  
That in order to manage or encourage equal water use by customers, drinking water tariffs are prepared progressively for customers whose water use level exceeds minimum standard of basic need.
4. *Simplicity:*  
That the adjustment of water tariff is simplified based on classification and water use block.
5. *Transparency:*  
That in the determination of the water tariff, PDAM must prepare and deliver information to customers clearly and openly, concerning tariff calculation and determination, and hold consultancy and introduction to customers before the determined tariff is applied.

In addition, the tariff adjustment must also refer to the prevailing legislation, such as:

1. Government Regulation No. 16 of 2005 regarding Development of Drinking Water Procurement System.
2. Regulation of the Minister of Home Affairs No. 2 of 1998 regarding Guidelines on Drinking Water Tariff Determination at PDAM (Regional Water Company).
3. Instruction of the Minister of Home Affairs No. 8 of 1998 regarding Implementation Directives on Drinking Water Tariff Determination at PDAM (Regional Water Company).
4. Regional Regulation of Bandung City No. 29 of 2001 regarding Drinking Water Service Management.

## I.3. PROPOSAL OBJECTIVES AND SYSTEMATICS

This proposal is prepared to present tariff adjustment plan of PDAM Kota Bandung for 2006 and the related background. The proposal begins with elaboration of general performance of PDAM since 2003, both technical and financial, including constraints encountered by PDAM. The proposal will also explain the 2006 tariff adjustment calculation basis, and service recovery and improvement plans and the relations thereof to the tariff adjustment.

Please note that the 2006 tariff adjustment planned by PDAM is a tariff adjustment for clean water and its related fixed charges. Therefore, the tariff adjustment calculation basis, such as the quantity of water sold, water revenues, cash operational expenses, depreciation cost, and long-term debt payment (interest cost and principal past due), and others, that are presented herein come from revenues and expenses for clean water only. This is to see how much the expenses born by per cubic meter clean water (excluded wastewater), and how much revenue per cubic meter water sold that must be generated to cover the above expenses, so that suitable tariff for clean water can be determined.

Systematics of tariff adjustment proposal is as follows:

1. *Section 1: Introduction*  
This section explains the factors that form the background of the need of PDAM Kota Bandung to adjust tariff.
2. *Section 2: Existing Condition of PDAM*  
This section explains existing condition and performance of PDAM in general, both technical and financial.
3. *Section 3: 2006 Tariff Adjustment Plan*  
This section explains the 2006 tariff adjustment plan and its relation to the existing condition and recovery and service improvement plan.
4. *Section 4: Conclusion*  
This section contains a conclusion on the plan of drinking water tariff adjustment of PDAM Kota Bandung in 2006.
5. *Appendices*  
This section contains supporting documents and data.

## 2. EXISTING CONDITION OF PDAM KOTA BANDUNG

### 2.1. GENERAL CONDITION OF BANDUNG CITY

Bandung is the capital of West Java province situated between 107°36" East Longitude and 6°55" South Latitude, with altitude of 791 m above sea level. With average temperature of 23.6° C and average raindrops of 156.4 mm, Bandung has humid and cool mountain climate.

The city extending 16,729.50 km<sup>2</sup> consists of 26 sub-districts and 139 villages with total population of 2,232,624 people (result of the 2004 National Economic Census), and growth population rate of 0.2%. Average population density of Bandung is 13,346 people/km<sup>2</sup>, and Bojongloa Kaler is a sub-district with the highest density, namely 38,288 people/km<sup>2</sup>.

### 2.2. TECHNICAL AND GENERAL CONDITIONS OF PDAM KOTA BANDUNG

#### 2.2.1. TOTAL CONNECTIONS AND NUMBER OF WATER SOLD

At present, PDAM Kota Bandung operates with production capacity of 2,571 liter per second (lps) with three main water sources, namely spring, ground water, and surface water. 87% or 2,230 lps of total capacity come from surface water. Meanwhile, the water originating from spring and ground water is only 177 lps (7%) and 164 lps (6%) respectively.

Within the last three years (2003–2005), total connections of clean water customer decreased by 0.46%, from 143,669 in 2003 to 143,003 in 2005. PDAM had to shut down connections that did not get water, and/or that did not pay the bills. The closing happened to residential and industrial connections. These two customer groups decreased by 1.92% and 0.22% respectively during 2003 - 2005.

With total customers representing 90.09% of total connections, the decrease by only 1.92% in household customer group could affect that of total customers on the whole, although at the same time, commercial and social customer groups increased positively by 16.39% and 3.91% respectively. Only commercial customer group that indicated positive growth each year for the 2003 - 2005 periode. This customer group increased by 4.17% in 2004 and 11.73% in 2005.

**Table 2 Total Connections and Total Employees**

	Composition	2003	2004	2005	Increase (2003 – 2005)
Social	1.61%	2,200	2,419	2,286	3.91%
Household & Government	90.09%	130,298	129,177	127,791	-1.92%
Commercial	7.99%	10,711	11,158	12,467	16.39%
Industry	0.32%	459	440	458	-0.22%
<b>Total Connections</b>	<b>100.00%</b>	<b>143,669</b>	<b>143,195</b>	<b>143,003</b>	<b>-0.46%</b>
<i>Increase in Connections</i>			-0.33%	-0.13%	
Total Employees		935	935	935	0.00%
Ratio of Employees/1000 SL		7	7	7	

Total employees of PDAM in 2005 were 935. This amount has not changed since 2003. This resulted in ratio of total employees per 1,000 direct connections was also stable during the 2003 – 2005 period, as presented in table 2 above. Concerning empowerment of human resources and its relation to the total connections, this amount indicates that PDAM has followed the given provisions/standard.

**Table 3 Total Sold Water (000 m<sup>3</sup>)**

	Composition	2003	2004	2005	Increase (2003 – 2005)
Social	5.0%	1,878	1,778	1,700	-9.45%
Household & Government	83.0%	28,456	27,508	28,063	-1.38%
Commercial	11.0%	3,381	3,613	4,002	18.36%
Industry & Special	1.0%	377	391	351	-6.95%
<b>Total Water Sold</b>	<b>100.00%</b>	<b>34,092</b>	<b>33,290</b>	<b>34,116</b>	<b>0.07%</b>
<i>Increase</i>			-2.35%	2.48%	

Although total connections decreased during the 2003 – 2005 period, number of water sold increased slightly by 0.07% during this period. This was driven by stable growth of water consumption by commercial customers from year to year. In line with the growth of total connections, water consumption of commercial customer group (absorbing 11% of total sold water) increased by 18.36%.

At present, with the largest total connections, household customer group consumes 83% of total sold water. However, in line with the decrease in total connections, water consumption of this customer group decreased by 1.38% during the 2003 – 2005 period. The highest decrease in total water consumption was in social customer group, namely by 9.45% in the same period, followed by industry customer group that decreased by 6.95%.



## 2.2.2. RECOVERY AND SERVICE IMPROVEMENT EFFORTS

Several recovery and service improvement efforts that have been taken by PDAM Kota Bandung within the last few years are among others:

1. Production and Distribution sector:
  - Increase or addition of water debit from spring and artesian well.
  - Optimization of transmission pipe water debit of Cisangkuy River amounting to  $\pm 100$  l/second.
  - Increase in Ciasahan spring debit of  $\pm 15$  l/second, and Cisurupan spring  $\pm 10$  l/second.
  - Artesian well construction in Cijerah area.
  - Reactivation of ground water sources AW 4, AW 8, AW 11, AW 14 amounting to  $\pm 37$  l/second.
  - Construction of 3 brondcaptering around Ciasahan spring amounting to  $\pm 46$  l/second, Lebak Baygon springs I, II, III amounting to  $\pm 20$  l/second, Waringin spring  $\pm 60$  l/second, Panyairan spring  $\pm 15$  l/second.
  - Construction of Cipanjalu brondcaptering amounting to  $\pm 12$  l/second.
  - Construction of Citalaga pipe installation amounting to  $\pm 10$  l/second.
  - Construction of local artesian well in Gempol Asri complex amounting to  $\pm 7$  l/second.
  - Optimization of artesian wells AW1, AW2, AW6, AW7, AW9, AW12, AW13.
  - Construction of spring brondcaptering for Sukamiskin prison amounting to  $\pm 20$  l/second.
  - Preparation of water debit increase in Dago Bengkok amounting to  $\pm 300$  l/second.
  - Water quality improvement with construction of mini water treatment plant in artesian wells of Kiara Asri, Citarip, and Arcamanik.
  - Arrangement of clean water network in Brandgang, old channel closing, and pressure evaluation in various areas.
  - Decrease in water loss by closing channels that are potential to lose water, and control over old pipeline.
2. Service Administration sector:
  - Updating of customers' data.
  - Application of on-line system in 14 auxiliary cashiers.
  - Application of call center 109 and SMS gateways.
  - Control over customers' accounts receivable with Notice on Arrears (SPT).
  - Acceleration of reporting on financial and performance positions.

## 2.3. FINANCIAL CONDITION OF PDAM KOTA BANDUNG

### 2.3.1. REVENUES

Table 4 indicates that the majority 78% of PDAM's operational revenues originated from water revenues, consisting of water revenues and fixed charges revenues. Meanwhile, non water revenues and waste water revenues only represented 3% and 19% respectively, from

total operational revenues. Non water revenues consist of revenues from new connections, penalty, reconnections, and so forth. Waste water revenues originated from waste water service fees (30% of water revenues).

**Table 4 Revenues (Rp 000)**

	Composition	2003	2004	2005	Increase (2003 – 2005)
Water Revenues	77.89%	68,018,185	67,992,765	68,699,665	1.00%
Non Water Revenues	3.23%	2,617,513	2,882,097	2,984,526	14.02%
Waste Water Revenues	18.88%	16,406,440	16,345,767	16,879,806	2.89%
<b>Operational Expenses</b>	<b>100.00%</b>	<b>87,042,138</b>	<b>87,220,628</b>	<b>88,563,998</b>	<b>1.75%</b>
<i>Increase in Revenues</i>			0.21%	1.54%	
<b>Net Profit</b>		<b>5,218,413</b>	<b>5,397,168</b>	<b>3,456,681</b>	<b>-33.76%</b>
<i>Increase in Net Profit</i>			3.43%	-35.95%	

Table 4 also indicated the development of water revenues, non water revenues, waste water revenues, and total operational revenues during the 2003 – 2005 period. It is apparent that in line with low growth of total sold water (0.07%), total water revenues and total operational revenues only increased by 1.00% and 1.75% respectively. Meanwhile, non water revenues increased quite significantly during the 2003 – 2005 period, namely by 14.02%. With the number of customers that kept decreasing during this period, the increase in non water revenues originated from non water revenues outside new connection fees, such as penalty, reconnection, and so forth.

**Table 5 Water Revenues (Rp 000)**

	Composition	2003	2004	2005	Increase (2003 – 2005)
Water Revenues	78.45%	53,226,293	53,272,185	54,103,446	1.65%
Fixed Charges Revenues	21.55%	14,791,892	14,720,580	14,596,220	-1.32%
<b>Total Water Revenues</b>	<b>100.00%</b>	<b>68,018,185</b>	<b>67,992,765</b>	<b>68,699,665</b>	<b>1.00%</b>
<i>Water Revenues Increase</i>			0.09%	1.56%	
<i>Fixed Charges Increase</i>			-0.48%	-0.85%	
<i>Increase in Water Revenues</i>			-0.04%	1.04%	

The development of water revenues consisting of water tariff revenues and fixed charges revenues is presented in table 5 Revenues from water tariff and total water revenues increased by 1.56% and 1.04% respectively in 2005, larger than the increase in the previous year. The increase was triggered more by reclassification of customers performed by PDAM in 2005, not due to tariff adjustment.

Low growth of total water sold caused average water tariff (including fixed charges) to decrease in 2005. As described in table 6, this item decreased in that year, by 1.37%. However, during the 2003 – 2005 period, average water tariff (including fixed charges) increased by 0.93%, from Rp 1.995/m<sup>3</sup> in 2003 to Rp 2.014/m<sup>3</sup> in 2005.

**Table 6 Average Operational Revenues and Average Water Tariff (Rp/m<sup>3</sup>)**

	<b>2003</b>	<b>2004</b>	<b>2005</b>	<b>Increase (2003–2005)</b>
Average Operational Revenues	2,553	2,620	2,596	1.68%
<i>Increase</i>		2.62%	-0.92%	
Average Water Tariff	1,995	2,042	2,014	0.93%
<i>Increase</i>		2.36%	-1.37%	
Average Water Tariff (excl. fixed charges)	1,561	1,600	1,586	1.58%
<i>Increase</i>		2.50%	-0.90%	

During the 2003 – 2005 period, PDAM Kota Bandung could earn net profit. However, note that the profit was generated from PDAM's failure to fully pay its long-term debt. In addition, the data indicated that PDAM's net profit significantly decreased by 33.76%. This indicates that although number of water sold increased, the current tariff structure cannot generate water revenues that can compete with rapid inflation growth in the last few years.

## **2.3.2. RECURRENT EXPENSES**

Recurrent operational expenses of PDAM consist of operational and maintenance expenses (cash operational cost), depreciation cost, and long-term debt payment (interest and principal), as elaborated in table 7.

The table presents the development of operational expenses of PDAM during the 2003 – 2005 period. Labor expenses were the largest cost component of total operational expenses. On average basis during the 2003 – 2005 period, PDAM allocated 37.98% of its total operational expenses for labor cost.

The next largest cost component was debt payment (interest cost) and bad debt expenses that absorbed about 12.42% and 11.31% respectively on average of total operational expenses. For debt payment (interest cost), it is estimated that the above portion is lower than it should be because all this time PDAM has only been partly serving its long-term debt.

In general, PDAM can reduce the growth of operational and maintenance expenses in 2005. It is apparent that the growth of expenses decreased from 16.09% in 2004 to 0.21% in 2005. This was triggered among others by the decreased growth of labor, electricity, and bad debt expenses in 2005.

The data indicated that during the 2003 – 2005 period, OM cost per m<sup>3</sup> of water sold increased by about 16.33%, far higher than the increase in average water tariff within the same period. It was caused by increase in overhead costs, namely by 62.34%. Efficiency on office expenses, customer expenses, and other elements of overhead costs should be improved to minimize cost increase.

The second largest increase of total OM expenses was for chemical, which increased by 36.20% during 2003 – 2005. The decreasing quality of raw water caused the continuous increase in the use of chemical substances during the above period. In 2005 only, expenses for chemical increased by 41.40%. Another cause of the increase was that of chemical production price due to inflation. There was also a fact that part of chemical substances were imported. Devaluation of Rupiah for the last few years increased the price of chemical substances.

After drastic decrease by 56.90% in 2004, maintenance expenses drastically decreased again by 198.62% in 2005. Totally, expenses for this component decreased by 28.71% during 2003 – 2005. Numerous repairs of old distribution and transmission pipeline, and control over leakage, were assumed to be the main cause of the increase in maintenance expenses. The old pipeline implied PDAM's need to immediately implement the network rehabilitation plan for the purpose of recovery and service improvement.

**Table 7 OM Expenses Per m<sup>3</sup> of Water Sold (Rp/m<sup>3</sup>)**

	Composition	2003	2004	2005	Increase (2003 – 2005)
Labor	37.98%	755	857	886	17.25%
Electricity and fuel	5.30%	103	126	120	17.00%
Chemical substances	4.94%	97	94	133	36.20%
Maintenance	9.13%	220	95	283	28.71%
Overhead	9.39%	164	188	266	62.34%
Bad Debt Expenses	11.31%	201	435	111	-44.62%
Raw Water	1.24%	29	26	27	-7.98%
Water in bulk	0.00%	0	0	0	0.00%
<b>Total OM Expenses</b>	<b>79.29%</b>	<b>1,569</b>	<b>1,822</b>	<b>1,825</b>	<b>16.33%</b>
<i>Increase</i>			16.09%	0.21%	
Depreciation	8.29%	180	188	177	-1.90%
Debt Service	12.42%	383	231	198	-48.44%
<b>Total Operational Expenses</b>	<b>100.00%</b>	<b>2,132</b>	<b>2,240</b>	<b>2,200</b>	<b>3.16%</b>
<i>Increase</i>			5.05%	-1.80%	

Operational expenses for labor increased by 17.25% within the 2003 – 2005 period. This was caused by adjustment of personnel salary in 2004. Besides, expenses for electricity and fuel also increased by about 17.00% within the same period, which was caused by the increase in fuel price and basic electricity tariff. Meanwhile, expenses for raw water and bad debt decreased by 7.98% and 44.62% respectively. The significant decrease in the bad debt expenses was triggered by improvement in collection effort.

Total expenses for long-term debt payment within the 2003 – 2005 period decreased by 48.44%. The annual decrease was respectively 39.76% in 2004 and 14.41% in 2005. This was caused by PDAM's failure to fully pay interest cost and principal loan within the 2003 – 2005 period.

The following table presents how is the relation between average water tariff (including and excluding fixed charges) with average operational and maintenance costs, depreciation cost, and debt payment.

**Table 8 Average Water Tariff (Excl. Fixed Charges) and Average Expenditure Per m<sup>3</sup> of Sold Water (Rp/m<sup>3</sup>)**

	2003	2004	2005	Cost/Tariff '03	Cost/Tariff '04	Cost/Tariff '05
<b>Average Water Tariff</b>	<b>1,561</b>	<b>1,600</b>	<b>1,586</b>			
Labor	755	857	886	48.37%	53.56%	55.86%
Electricity and fuel	103	126	120	6.60%	7.88%	7.57%
Chemical substances	97	94	133	6.21%	5.88%	8.39%
Maintenance	220	95	283	14.09%	5.94%	17.84%
Overhead	164	188	266	10.51%	11.75%	16.77%
Bad Debt Expenses	201	435	111	12.88%	27.19%	6.99%
Raw Water	29	26	27	1.86%	1.63%	1.70%
Water in bulk	0	0	0	0.00%	0.00%	0.00%
<b>Total OM Expenses</b>	<b>1,569</b>	<b>1,822</b>	<b>1,825</b>	<b>100.51%</b>	<b>113.88%</b>	<b>115.07%</b>
Depreciation	180	188	177	11.53%	11.75%	11.16%
Debt payment	383	231	198	24.54%	14.44%	12.48%
<b>Total Operational Expenses</b>	<b>2,132</b>	<b>2,240</b>	<b>2,200</b>	<b>136.58%</b>	<b>140.00%</b>	<b>138.71%</b>

Table 8 above indicated that average water tariff could not cover the operational and maintenance expenses, and total operational expenses during the 2003 – 2005 period. In 2005, average water tariff was 15.07% lower than the average operational and maintenance expenses, and 38.71% lower than total average operational expenses.

**Table 9 Average Water Tariff (Incl. Fixed Charges) and Average Expenditure Per m<sup>3</sup> of Sold Water (Rp/m<sup>3</sup>)**

	2003	2004	2005	Cost/Tariff '03	Cost/Tariff '04	Cost/Tariff '05
<b>Average Water Tariff</b>	<b>1,995</b>	<b>2,042</b>	<b>2,014</b>			
Labor	755	857	886	37.85%	41.97%	43.99%
Electricity and fuel	103	126	120	5.16%	6.17%	5.96%
Chemical	97	94	133	4.86%	4.60%	6.60%
Maintenance	220	95	283	11.03%	4.65%	14.05%
Overhead	164	188	266	8.22%	9.21%	13.21%
Bad Debt Expenses	201	435	111	10.08%	21.30%	5.51%
Raw Water	29	26	27	1.45%	1.27%	1.34%
Water in bulk	0	0	0	0.00%	0.00%	0.00%
<b>Total OM Expenses</b>	<b>1,569</b>	<b>1,822</b>	<b>1,825</b>	<b>78.65%</b>	<b>89.23%</b>	<b>90.62%</b>
Depreciation	180	188	177	9.02%	9.21%	8.79%
Debt payment	383	231	198	19.20%	11.31%	9.83%
<b>Total Operational Expenses</b>	<b>2,132</b>	<b>2,240</b>	<b>2,200</b>	<b>106.87%</b>	<b>109.70%</b>	<b>109.24%</b>

Meanwhile, table 9 indicated that average water revenues consisting of water tariff and fixed charges, could fulfill the operational and maintenance expenses, but could not fulfill total operational expenses for the 2003 – 2005 period. This indicates that PDAM should adjust clean water tariff in 2006 to compete with rapid growth of operational expenses.

### 2.3.3. ACCOUNT RECEIVABLES AND CURRENT RATIO

In case of collection of accounts receivable, it is apparent that during the 2003 – 2005 period, PDAM has succeeded in holding efficiency by decreasing the number of days of collection of accounts receivable by 34.91%, from 225 days in 2003, and increasing them sharply by 960 days in 2004, to about 147 days in 2005. In line with this matter, as already explained in the foregoing, the cost of appropriation of accounts receivable per m<sup>3</sup> of sold water also decreased by 44.62%, from Rp 201/m<sup>3</sup> to Rp 111/m<sup>3</sup> within the 2003 – 2005 period. Business receivable per m<sup>3</sup> of sold water also decreased by 27.21% for this period.

However, PDAM should take into account the decrease in current ratio within the 2003 – 2005 period, namely by 22.10%. The ratio measures the capacity level of PDAM's current assets to fulfill its current liability. It decreased from 2.25 in 2003 to 0.92 in 2004. With efficiency improvement, the ratio increased again to 1.75 in 2005. It means that PDAM could cover 1.75x its current liability. PDAM should increase the ratio to at least 2.0 in the subsequent years

**Table 10 Efficiency of Collection and Current Ratio**

	2003	2004	2005	Increase (2003 – 2005)
Days of Collection	225	960	147	-34.91%
Bad Debt Expenses (Rp/m <sup>3</sup> )	201	435	111	-44.62%
Business Receivable (Rp/m <sup>3</sup> )	677	493	493	-27.21%
Current Ratio	2.25	0.92	1.75	-22.10%

### 2.3.4. LONG TERM DEBT

Based on the last data, the position of total long-term debt of PDAM Kota Bandung per December 31, 2005 was Rp 327.8 billion. This sum consists of clean water debt (including outstanding debt) amounting to Rp 211.5 billion, and waste water debt (including outstanding debt) amounting to Rp 116.3 billion. The position of total long-term outstanding debt per December 31, 2005 was Rp 167.4 billion.

**Table 11 Long-term debt (Rp billion) and DSCR**

	2003	2004	2005	Increase (2003 – 2005)
Long-term Debt	106.4	88.6	160.4	50.75%
Outstanding Debt	137.2	130.5	167.4	22.01%
<b>Total Long-term Debt</b>	<b>243.6</b>	<b>219.1</b>	<b>327.8</b>	<b>34.57%</b>
Total Debt Increase		-10.06%	49.64%	
Increase in arrears		-4.83%	28.28%	
Debt Payment Capacity	1.75	2.19	2.19	25.14%
Ratio increase		25.14%	0.00%	

The above table presented the growth of long-term debt, outstanding debt, and debt payment ratio for the 2003 – 2005 period. Interest rate of the above debts ranges between 6% - 9% per annum, with return period until 2017. The outstanding debts consist of past due interest, penalty cost, commitment fee, administration cost, and so forth. This indicates that all this time, PDAM only pays part of its principal loan. Table I I also indicated the development of PDAM's ratio of capability to settle its long-term debts (DSCR: Debt Service Coverage Ratio). It is evident that the ratio increased from 1.75 in 2003 to 2.19 in 2004 and 2005. The ratios indicate that PDAM's profit before interest cost can bear 2.19x debt payment (interest cost and principal loan).

However, we should consider that the ratio was calculated based on the debt payment amount (interest cost and principal loan) made by PDAM. Meanwhile, all this time, PDAM only pays part of its long-term debt amount. Therefore, the ratio has not described PDAM's actual capability to settle its long-term debt. In relation to the situation of its long-term debt, PDAM was suggested to file a request to the Ministry of Finance to reschedule its long-term debt in accordance with the Government Regulation No. 14 of 2005. At present, the regulation of the relevant minister, Regulation of the Minister of Finance No. 107 of 2005 has reached final preparation phase for application.

### 2.3.5. TARIFF

The structure of clean water tariff in PDAM Kota Bandung consists of 4 (four) water consumption blocks, namely consumption blocks of 0 – 10 m<sup>3</sup>, 11 – 20 m<sup>3</sup>, 21 – 30 m<sup>3</sup>, and > 30 m<sup>3</sup>, which are effective for 4 (four) customer groups, namely Group I (social customer), Group II (household and government customers), Group III (commercial customer), and Group IV (industry customer). The lowest tariff at present is Rp 560/m<sup>3</sup>. The same with basic tariff (the lowest tariff for household customer), as described in table 12.

With the effective tariff structure as described in the above table, and fixed charges amounting to Rp 8,400/customer, average water revenues (consisting of water tariff revenues and fixed charges revenues) per m<sup>3</sup> of sold water increased by 0.93% during 2003 – 2005, from Rp 1.995/m<sup>3</sup> to Rp 2.014/m<sup>3</sup>. Meanwhile, average water tariff itself increased by 1.58% within the same period, from Rp 1.561/m<sup>3</sup> to Rp 1.586/m<sup>3</sup>.

**Table 12 Effective Tariff Structure (Rp/m<sup>3</sup>)**

	0 – 10 m <sup>3</sup>	11 – 20 m <sup>3</sup>	> 20 m <sup>3</sup>
<b>Group I</b>			
Social General 1A	560	560	560
Social Special 1B	560	560	875
<b>Group II</b>			
Household 2A1	560	875	1,225
Household 2A2	1,075	1,900	2,700
Household 2A3	1,350	2,150	3,250
Household 2A4	1,600	2,700	4,075
Government Offices 2B	1,075	1,875	2,700
<b>Group III</b>			
Commercial Small 3A	1,625	2,725	4,100
Commercial Large 3B	2,100	3,175	4,550

	0 – 10 m <sup>3</sup>	11 – 20 m <sup>3</sup>	> 20 m <sup>3</sup>
<b>Group IV</b>			
Industry Small 4A	2,600	3,675	5,000
Industry Large 4B	3,125	4,200	5,550

Table 13 presented that the increase in average water tariff and average water revenues for the 2003 – 2005 period was far slower than that in low cost, basic cost, full cost, and financial cost. Once again, the inflation rate due to the increase in fuel-based oil price and basic electricity tariff, is the main reason.

Low cost is defined as operational and maintenance expenses. Basic cost is low cost plus debt payment (interest cost and principal loan). Furthermore, full cost is low cost plus depreciation cost and certain return level of total assets. Meanwhile, financial cost is the entire cost and expenses incurred from daily operation of PDAM consisting of operational and maintenance expenses (including administration and general expenses), depreciation cost, debt payment (interest cost and principal loan), and certain return level of total assets. In order to see how big is PDAM's capacity or performance to fulfill the cost and expenses incurred from its operation, it is necessary to see how is the comparison between the average water tariff and average water revenues, and the abovementioned expenses, particularly financial cost because it includes all expenses that have to be made by PDAM.

**Table 13 Average Revenues and Expenditure Per m<sup>3</sup> of Sold Water (Rp/m<sup>3</sup>)**

	2003	2004	2005	Increase	(A)/Cost '05	(B)/Cost '05
Average Water tariff (A)	1,561	1,600	1,586	1.58%		
Average Water Revenues (B)	1,995	2,042	2,014	0.93%		
Low Cost	1,569	1,822	1,825	16.32%	86.90%	110.36%
Basic Cost	1,952	2,052	2,023	3.64%	78.40%	99.56%
Full Cost	2,273	2,539	2,759	21.38%	57.49%	73.00%
Financial Cost	2,656	2,770	2,956	11.29%	53.65%	68.13%

It is apparent that in 2005, the average water tariff could only bear 86.90% of low cost, 78.40% of basic cost, and 57.49% of full cost, and 53.65% of financial cost. Meanwhile, the average water revenues could fulfill 110.36% of low cost, but only 99.56% of basic cost, 73.00% of full cost, and 68.13% of accounting cost. The growth of financial cost by 11.29% during 2003 – 2005, was far higher than that of the average water tariff and average revenues. Therefore, the capability of the average water tariff and average water revenues to cover financial cost automatically decreased during the 2003 – 2005 period. This implies that PDAM should adjust clean water tariff in 2006 in order to compete with rapid growth of its operational expenses.



## 3. TARIFF ADJUSTMENT PLAN

As a company providing clean water and dirty water service for the community, PDAM Kota Bandung keeps trying to develop and improve its service quality. However, as already explained in the previous sections, the growth of operating and maintenance expenses, depreciation cost, debt payment, and other expenses for clean water during the last few years, has far exceeded that of water revenues of PDAM. Consequently, rehabilitation/recovery plans and debt payment are stagnant and cannot be realized yet.

The last time PDAM Kota Bandung held tariff adjustment was in 2001. The structure of tariff that is currently applicable cannot PDAM's expenditure plan anymore. According to the prevailing provisions, PDAM can adjust tariff once in 1 (one) year to compensate for inflation rate and loan interest charges, and the tariff can be reviewed not later than once in 4 (four) years in case of change of cost structure, and for cost recovery issued in the course of operation. Concerning this matter, PDAM Kota Bandung plans to perform tariff adjustment in 2006.

### 3.1. PROJECTION OF 2006 REVENUES AND EXPENDITURES

#### 3.1.1. ASSUMPTIONS

Calculation of tariff adjustment requires projection of the 2006 expenditures and revenues. In this case, the approach that will be applied to the calculation is cash flow revenues and expenditures. Average water tariff per m<sup>3</sup> is calculated based on average water revenues consisting of water price and fixed charges, divided by total water sold.

We should remember that the calculation of cash revenues and expenditures is designated for clean water only, without revenues and expenditures for dirty water, because the tariff to adjust is clean water tariff. Others assumptions applied to this calculation are among others:

1. Inflation rate is estimated to amount to 7.5%/year.
2. Water consumption is predicted to remain at 20 m<sup>3</sup>/SL/month.
3. NRW decrease is 2%/year.
4. Employees' cost increase is 6%/year.
5. Increase in new connections:
  - a. 2006 – 2008 : 1,000 SL/year.
  - b. 2009 – 2010 : 10,000 SL/year.
6. Recovery and service improvement cost for water debit addition, pipeline rehabilitation, new WTP construction preparation, new connections, and so forth:
  - a. 2006 – 2008 : Rp 21 billion/year.
  - b. 2009 – 2010 : Rp 25 billion/year.

7. Other expenses (tax and others)
  - a. 2006 – 2010 : Rp 2.5 billion/year.
8. Long-term loan payment for clean water in 2006:
  - a. Interest Cost : Rp 16.9 billion
  - b. Principal Loan : Rp 17.6 billion

### 3.1.2. LOAN PAYMENT

Long-term debt payment for clean water in 2006 is based on the assumption that the debt will be paid in 2017 with interest rate that ranges between 6% and 9% per annum. The schedule of clean water debt payment during the 2006 – 2010 period is presented hereinbelow.

**Table 14 Payment Schedule of Interest Cost and Principal Loan of Clean Water (Rp 000)**

	2006	2007	2008	2009	2010
Interest Cost	16,923,115	15,512,856	14,102,596	12,692,336	11,282,077
Principal Loan	17,628,245	17,628,245	17,628,245	17,628,245	17,628,245
<b>Debt Payment</b>	<b>34,551,360</b>	<b>33,141,101</b>	<b>31,730,841</b>	<b>30,320,581</b>	<b>28,910,322</b>

### 3.1.3. PROJECTION OF EXPENDITURE

Projection of cash flow expenses consists of cash expenses for operating and maintenance expenses, debt payment (interest cost and principal loan), rehabilitation and operational recovery, tax, and so forth. In calculating the cash flow, depreciation cost is not calculated because it is not cash cost. Projection of cash expenses and average expenses for the 2006 – 2010 period is presented in the following table.

**Table 15 Cash Expenses (Rp 000) and Average Expenses (Rp/m<sup>3</sup>)**

	2006	2007	2008	2009	2010
Cash Operating Cost	65,782,124	68,740,586	72,736,211	103,433,542	113,739,599
Interest Cost	16,923,115	15,512,856	14,102,596	12,692,336	11,282,077
Principal Loan	17,628,245	17,628,245	17,628,245	17,628,245	17,628,245
Recovery & Improvement	21,000,000	21,000,000	21,000,000	25,000,000	25,000,000
Tax and others	2,500,000	2,500,000	2,500,000	2,500,000	2,500,000
<b>Expenses</b>	<b>123,833,485</b>	<b>125,381,687</b>	<b>127,967,052</b>	<b>161,254,124</b>	<b>170,149,921</b>
Average Expenses/m <sup>3</sup>	3,605	3,627	3,678	4,342	4,326

It is apparent that besides for cash operating cost (outside depreciation cost) and loan payment, PDAM needs costs for its recovery and service improvement. The costs are needed for water debit increase, pipeline rehabilitation, new connections, leakage rate decrease, and preparation of water processing plant construction in Cimenteng amounting to 1,100 l/second that has potential to serve about 60,000 new connections and 20,000 existing connections. With these expenses, in 2006, average expenses are about Rp 3,605/m<sup>3</sup>.

### 3.1.4. PROJECTION OF WATER REVENUES WITHOUT TARIFF ADJUSTMENT

With assumption that the number of connections will increase by 1,000 SL per year during the 2006 – 2008 period and water consumption per connection per month is 20 m<sup>3</sup>, total connections will be 144,003 in 2006. The quantity of water sold will be 34,4 million m<sup>3</sup> in the same year.

**Table 16 Projection of Total Connections and Total Water Sold**

	2006	2007	2008	2009	2010
Connection (SL)	144,003	145,003	146,003	156,003	166,003
Sold Water (000 m <sup>3</sup> )	34,352	34,572	34,792	37,139	39,335

Without tariff adjustment and fixed charges, with total connections and water sold as described in the table above, water revenues only increase by 0.40%, from Rp 68.7 billion in 2005 to Rp 68.9 billion in 2006. Average water revenues increase to Rp 2,008/m<sup>3</sup> in 2006. It is apparent that average water price and average water revenues cannot yet cover average expenses required.

**Table 17 Water Revenues (Rp 000) and Average Water Revenues (Rp/m<sup>3</sup>) without Tariff Adjustment**

	2006	2007	2008	2009	2010
Water Price Revenues	54,455,795	54,783,136	55,110,477	58,608,965	61,882,373
Fixed Charges Revenues	14,515,502	14,616,302	14,717,102	15,725,102	16,733,102
<b>Water Revenues</b>	<b>68,971,298</b>	<b>69,399,438</b>	<b>69,827,579</b>	<b>74,334,067</b>	<b>78,615,475</b>
Average Water Price/m <sup>3</sup>	1,585	1,585	1,584	1,578	1,573
Average Water Revenues/m <sup>3</sup>	2,008	2,007	2,007	2,002	1,999

## 3.2. 2006 TARIFF ADJUSTMENT

### 3.2.1. TARIFF ADJUSTMENT NEED

Based on the projection of water revenues as described above, with the existing fixed charges amounting to Rp 8,400/SL, average water revenues that can be reached is only Rp 2,008/m<sup>3</sup>. Meanwhile, the projection of average expenses per m<sup>3</sup> of sold water needed in 2006 is Rp 3,605/m<sup>3</sup>. Average revenues can only cover 55.70% of the required average expenses. Therefore, the required increase in the average tariff is 80%.

**Table 18 Tariff Increase Need (Old Fixed Charges)**

		2006
Fixed Charges/Connection	(Rp/SL)	8,400
Average Water Revenues/m <sup>3</sup>	(Rp/m <sup>3</sup> )	2,008
Average Expenses/m <sup>3</sup>	(Rp/m <sup>3</sup> )	3,605
Tariff Increase Need		80%

However, adjustment of average water tariff by 80% is too heavy for the community, considering the increase in fuel-based oil and basic electricity tariffs in the last several years. In relation to this matter, in order to reduce average tariff adjustment to lower than 80%, PDAM also proposed an adjustment to fixed charges revenues, as will be elaborated in the next section.

### 3.2.2. PROPOSAL ON ADJUSTMENT OF FIXED CHARGES AND CLEAN WATER TARIFF

PDAM Kota Bandung proposed an adjustment of fixed charges from Rp 8,400/SL to Rp 16,000/SL. The proposed new fixed charges are still below fixed charges for electricity and home telephone. With the new fixed charges, before tariff adjustment, fixed charges revenues will increase from Rp 14.5 billion to Rp 27.7 billion in 2006. Total water revenues will be Rp 82.1 billion, and average revenues per m<sup>3</sup> of sold water will be Rp 2,390/m<sup>3</sup>.

With average revenues of Rp 2,390/m<sup>3</sup>, in order to cover average expenses amounting to Rp 3,605/m, average tariff adjustment required is only 51%, far smaller than the previous figure. Based on this matter, PDAM proposed average tariff adjustment by 51% and new fixed charges of Rp 16,000/SL. In addition, PDAM will not increase tariffs for social general 1A and social special 1B groups of customer, and household customer 2A1. However, adjustment of fixed charges also applies to all groups of customer. PDAM also plans to apply 3 (three) water consumption blocks, namely 0 – 10 m<sup>3</sup>, 11 – 20 m<sup>3</sup>, and > 20 m<sup>3</sup>.

**Table 19 Tariff Increase Need (New Fixed Charges)**

		<b>2006</b>
Water Price Revenues	(Rp 000)	54,455,795
Fixed Charges Revenues	(Rp 000)	27,648,300
<b>Water Revenues</b>	<b>(Rp 000)</b>	<b>82,104,095</b>
Fixed Charges/Connections	(Rp/SL)	16,000
Average Water Revenues/m <sup>3</sup>	(Rp/m <sup>3</sup> )	2,390
Average Expenses/m <sup>3</sup>	(Rp/m <sup>3</sup> )	3,605
Tariff Increase Need		51%

With average tariff adjustment by 51%, fixed charges of Rp 16,000/SL, and 3 (three) water consumption blocks, the proposal on new tariff structure is presented in the table herein below.

**Table 20 Proposal on New Tariff Structure (Rp/m<sup>3</sup>)**

	<b>0 – 10 m<sup>3</sup></b>	<b>11 – 20 m<sup>3</sup></b>	<b>&gt; 20 m<sup>3</sup></b>
<b>Group I</b>			
Social General 1A	560	560	560
Social Special 1B	560	560	875
<b>Group II</b>			
Household 2A1	560	875	1,225
Household 2A2	1,075	1,900	2,700
Household 2A3	1,350	2,150	3,250

	0 – 10 m <sup>3</sup>	11 – 20 m <sup>3</sup>	> 20 m <sup>3</sup>
Household 2A4	1,600	2,700	4,075
Government Offices 2B	1,075	1,875	2,700
<b>Group III</b>			
Commercial Small 3A	1,625	2,725	4,100
Commercial Large 3B	2,100	3,175	4,550
<b>Group IV</b>			
Industry Small 4A	2,600	3,675	5,000
Industry Large 4B	3,125	4,200	5,550

### 3.3. SERVICE RECOVERY PLANS POST TARIFF ADJUSTMENT OF 2006

After the water tariff adjustment in 2006, PDAM can immediately implement recovery and service improvement plan for its customers. The plan consists of among others:

1. To add water debit in Dago Bengkok area amounting to 300 l/second.
2. To prepare new installation construction with capacity of 1,100 l/second in South Bandung as part of optimalization of water debit in transmission pipe of Cisangkuy River.
3. To rehabilitate old distribution pipeline.
4. To improve water distribution so as to minimize water turn issues.
5. To minimize water leakage rate.
6. To utilize water springs, among others, Cikareo, Ciwangi, and Lapas.
7. To make full payment for loan interest cost and principal loan that are due.



## 4. CONCLUSION

The last time PDAM Kota Bandung held tariff adjustment was in 2001. However, in line with the course of time and rapid inflation rate, which was among others caused by the increase in fuel-based oil price and basic electricity tariff, the growth of operating and maintenance expenses, depreciation cost, debt payment, and other expenses for clean water for the last several years, has far exceeded that of water revenues of PDAM. The structure of tariff that is currently applicable cannot accomodate PDAM's expenditure plan anymore.

According to the prevailing provisions, PDAM can adjust tariff once in 1 (one) year to compensate for inflation rate and loan interest charges, and the tariff can be reviewed not later than once in 4 (four) years in case of change of cost structure, and for cost recovery issued in the course of operation. Concerning this matter, PDAM Kota Bandung plans to perform tariff adjustment in 2006.

The planned tariff adjustment and new tariff structure proposed by PDAM Kota Bandung are as follows:

1. Tariff adjustment is 51% on average with fixed expenses amounting to Rp 16,000/SL.
2. Tariff for social general IA and social special IB customer, and household 2A1 customer will not increase. However, adjustment of fixed expenses also applies to all groups of customer.
3. If previously PDAM used 4 (four) water consumption blocks, now PDAM will apply 3 (three) water consumption blocks, namely 0 – 10 m<sup>3</sup>, 11 – 20 m<sup>3</sup>, and > 20 m<sup>3</sup>.

**Table 21 Proposal on New Tariff Structure (Rp/m<sup>3</sup>)**

	0 – 10 m <sup>3</sup>	11 – 20 m <sup>3</sup>	> 20 m <sup>3</sup>
<b>Group I</b>			
Social General IA	560	560	560
Social Special IB	560	560	875
<b>Group II</b>			
Household 2A1	560	875	1,225
Household 2A2	1,075	1,900	2,700
Household 2A3	1,350	2,150	3,250
Household 2A4	1,600	2,700	4,075
Government Offices 2B	1,075	1,875	2,700
<b>Group III</b>			
Commercial Small 3A	1,625	2,725	4,100
Commercial Large 3B	2,100	3,175	4,550
<b>Group IV</b>			
Industry Small 4A	2,600	3,675	5,000
Industry Large 4B	3,125	4,200	5,550

The tariff adjustment is performed not only to fulfill operating and maintenance expenses, but also to fulfill its liabilities relating to loan payment. All this time, PDAM only pays part of interest cost and principal loan that become its liabilities. With this tariff adjustment, PDAM hopes that it can fulfill its liabilities of interest cost and principal loan, including the amounts in arrears.

In addition, with this tariff adjustment PDAM hopes that it can immediately perform its recovery and service improvement plan for its customers. The plan consists of among others:

1. To add water debit in Dago Bengkok area amounting to 300 l/second.
2. To prepare new installation construction with capacity of 1,100 l/second in South Bandung as part of optimalization of water debit in transmission pipe of Cisangkuy River.
3. To rehabilitate old distribution pipeline.
4. To improve water distribution so as to minimize water turn issues.
5. To minimize water leakage rate.
6. To utilize water springs, among others, Cikareo, Ciwangi, and Lapas.
7. To make full payment for loan interest cost and principal loan, including the amounts in arrears.



# APPENDICES

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SUMMARY



## APPENDIX 0

This section summarizes additional information and related data in regard to PDAM Kota Bandung's tariff adjustment plan in 2006. The additional information and related data are as follow:

1. Water price comparison.
2. 2003 – 2006 financial statements and 2006 – 2010 financial projection:
  - Income statement.
  - Balance sheet.
  - Cash flow statement.



## APPENDIX I – WATER PRICE COMPARISON

### WATER PRICE COMPARISON WITH OTHER PDAM

The following table indicates a comparison of the lowest tariff, average tariff, and year of the last tariff increase between several PDAMs in Indonesia, including PDAM Kota Bandung. It is apparent that PDAM Kota Bandung has the lowest tariff and lowest average tariff among the PDAMs. In addition, among the PDAMs, PDAM Kota Bandung is the PDAM not increasing tariff for the longest time.

**Water Price Comparison with other PDAM (Rp/m<sup>3</sup>)**

	Lowest Tariff	Average Tariff	Last Tariff Increase
Bandung City	560	2,014	2001
Bandung Regency	1,000	3,500	2003
Jakarta (TPJ)	4,367	6,000	2006
Makasar City	1,000	4,500	2004
Semarang City	1,608	4,500	2003
Sidoarjo Regency	1,350	3,700	2003
Tangerang Regency	1,850	5,000	2004

### COMPARISON OF PDAM WATER PRICE WITH OTHER WATER PRICE

If we compare with the price of other water, in this case with gallon water and cart water, it is apparent that the average price of PDAM water is the most inexpensive, about Rp 2.014/m<sup>3</sup> or Rp 2/Lt.

**Water Price Comparison (Rp/Lt)**

	Price
PDAM Water	2
Cart Water	50
Ready-to-Drink Water (Gallon)	500



## APPENDIX 2 – FINANCIAL STATEMENT – BALANCE SHEET

PDAM KOTA BANDUNG  
**Neraca**

	2003	2004	2005	2006	2007	2008	2009	2010
<b>AKTIVA (Rp 000)</b>								
Kas & Bank	20,071,162	14,172,433	28,743,359	31,493,848	18,074,819	13,072,255	16,597,648	20,834,960
Piutang Usaha	23,081,731	16,422,702	16,813,841	16,733,519	19,219,093	21,269,137	23,677,060	27,268,322
Piutang Lain-lain	4,281,969	3,714,062	2,018,008	2,629,553	3,020,143	3,342,293	3,720,681	4,285,022
Persediaan	1,909,196	1,217,507	1,062,744	1,209,310	1,303,810	1,398,310	1,492,810	1,605,310
Pembayaran Dimuka	1,761,874	593,706	2,555,446	2,722,280	2,885,617	3,058,754	3,242,280	3,436,816
<b>Aktiva Lancar</b>	<b>51,105,932</b>	<b>36,120,409</b>	<b>51,193,398</b>	<b>54,788,510</b>	<b>44,503,483</b>	<b>42,140,749</b>	<b>48,730,478</b>	<b>57,430,430</b>
Tanah	6,685,986	6,694,236	6,703,236	6,703,236	6,703,236	6,703,236	6,703,236	6,703,236
Harga Perolehan diluar tanah	259,114,788	262,190,453	268,735,493	268,735,493	289,735,493	310,735,493	331,735,493	356,735,493
Akumulasi Penyusutan	(204,126,099)	(202,622,044)	(210,665,962)	(219,068,291)	(228,079,620)	(237,699,950)	(248,045,279)	(259,115,608)
<b>Nilai Buku Aktiva Tetap</b>	<b>61,674,675</b>	<b>66,262,645</b>	<b>64,772,767</b>	<b>56,370,438</b>	<b>68,359,108</b>	<b>79,738,779</b>	<b>90,393,450</b>	<b>104,323,120</b>
Aktiva Tetap Dalam Penyelesaian	0	0	0	21,000,000	21,000,000	21,000,000	25,000,000	25,000,000
Aktiva Lain-Lain	65,806,630	74,001,785	142,082,203	142,232,203	142,382,203	142,532,203	144,917,203	146,147,203
<b>Total Aktiva</b>	<b>178,587,237</b>	<b>176,384,838</b>	<b>258,048,367</b>	<b>274,391,150</b>	<b>276,244,794</b>	<b>285,411,731</b>	<b>309,041,130</b>	<b>332,900,753</b>
<b>PASIVA (Rp 000)</b>								
Hutang Usaha	3,083,975	2,155,661	1,300,848	1,430,877	1,517,615	1,620,308	2,251,168	2,488,624
Hutang Lancar Lainnya	1,624,892	1,213,123	1,180,883	1,252,017	1,327,913	1,417,769	1,969,772	2,177,546
Hutang Pajak	519,515	264,423	320,375	4,929,849	9,902,424	13,609,210	14,292,891	17,098,352
Pinjaman Jangka Panjang Jatuh Tempo	17,510,760	35,494,879	26,448,943	27,316,390	27,316,390	27,316,390	27,316,390	27,316,390
<b>Hutang Lancar</b>	<b>22,739,142</b>	<b>39,128,086</b>	<b>29,251,049</b>	<b>34,929,133</b>	<b>40,064,342</b>	<b>43,963,677</b>	<b>45,830,221</b>	<b>49,080,912</b>
Pinjaman Jangka Panjang	243,591,339	219,056,120	327,796,675	300,480,286	273,163,896	245,847,506	218,531,117	191,214,727
Kewajiban Lainnya	13,060,378	13,450,230	19,419,182	45,868,125	45,868,125	45,868,125	45,868,125	45,868,125
<b>Hutang Jangka Panjang</b>	<b>256,651,717</b>	<b>232,506,349</b>	<b>347,215,858</b>	<b>346,348,411</b>	<b>319,032,021</b>	<b>291,715,631</b>	<b>264,399,242</b>	<b>237,082,852</b>
Uang Jaminan Langganan/Deff. SR baru	1,899,808	2,062,668	2,270,578	2,270,578	3,170,578	3,970,578	19,670,578	27,670,578
Penyertaan Pemerintah YBDS	0	0	0	0	0	0	0	0
<b>Hutang Lain-Lain</b>	<b>1,899,808</b>	<b>2,062,668</b>	<b>2,270,578</b>	<b>2,270,578</b>	<b>3,170,578</b>	<b>3,970,578</b>	<b>19,670,578</b>	<b>27,670,578</b>
<b>Total Hutang</b>	<b>281,290,667</b>	<b>273,697,104</b>	<b>378,737,485</b>	<b>383,548,121</b>	<b>362,266,941</b>	<b>339,649,887</b>	<b>329,900,041</b>	<b>313,834,342</b>
Kekayaan PEMDA Yg Dipisahkan	3,224,618	3,224,618	3,224,618	3,224,618	3,224,618	3,224,618	3,224,618	3,224,618
Penyertaan Pemerintah Pusat	40,184,143	40,184,143	40,184,143	40,184,143	40,184,143	40,184,143	40,184,143	40,184,143
Selisih Penilaian Kembali Aktiva Tetap	0	0	0	0	0	0	0	0
Modal Penyertaan Lain-lain	4,702,448	4,702,448	4,702,448	4,702,448	4,702,448	4,702,448	4,702,448	4,702,448
Dana Cadangan	2,490,592	2,490,592	7,239,156	(168,800,327)	(157,268,180)	(134,133,357)	(102,349,366)	(68,970,119)
Laba Rugi Thn Berjalan	(153,305,231)	(147,914,067)	(176,039,484)	11,532,147	23,134,823	31,783,991	33,379,246	39,925,321
<b>Modal dan Cadangan</b>	<b>(102,703,431)</b>	<b>(97,312,266)</b>	<b>(120,689,118)</b>	<b>(109,156,971)</b>	<b>(86,022,148)</b>	<b>(54,238,157)</b>	<b>(20,858,910)</b>	<b>19,066,411</b>
<b>Total Pasiva</b>	<b>178,587,237</b>	<b>176,384,838</b>	<b>258,048,367</b>	<b>274,391,150</b>	<b>276,244,794</b>	<b>285,411,731</b>	<b>309,041,130</b>	<b>332,900,753</b>
<i>Control</i>	<i>(0)</i>	<i>(0)</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>





# APPENDIX 3 – FINANCIAL STATEMENT – INCOME STATEMENT

PDAM KOTA BANDUNG								
<b>Laba (Rugi)</b>								
	<b>2003</b>	<b>2004</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>	<b>2009</b>	<b>2010</b>
<b>UMUM</b>								
Jumlah Penduduk (Jiwa)	2,225,000	2,232,624	2,237,000	2,242,593	2,248,199	2,253,819	2,259,454	2,265,103
Jumlah Penduduk Terlayani (Jiwa)	816,695	825,810	1,269,548	1,275,548	1,281,548	1,287,548	1,382,948	1,432,148
Cakupan Pelayanan (%)	36.71%	36.99%	56.75%	56.88%	57.00%	57.13%	61.21%	63.23%
Jumlah Pelanggan Akhir	143,669	143,195	143,003	144,003	145,003	146,003	161,903	170,103
Jumlah Sambungan Baru	(2,285)	(474)	(192)	1,000	1,000	1,000	15,900	8,200
Konsumsi m <sup>3</sup> /Bln (Thn)/Pelanggan	20	19	20	20	20	20	20	20
Jumlah Produksi (000 m <sup>3</sup> )	77,025	77,025	81,079	81,079	81,079	81,079	81,079	81,079
Jumlah Permintaan Air (000 m <sup>3</sup> )	34,092	33,290	34,116	34,352	34,572	34,792	38,533	40,205
Jumlah Konsumsi Air (000 m <sup>3</sup> )	34,092	33,290	34,116	34,352	34,572	34,792	38,533	40,205
Tk Pemulihan Biaya Min. (B. Akt) (Rp/m <sup>3</sup> )	2,328	2,422	2,407	3,091	3,151	3,233	3,700	3,805
Tarif rata-rata (Rp/m <sup>3</sup> )	1,995	2,042	2,014	2,783	3,177	3,493	3,511	3,876
Pemulihan Biaya Min. (B. Akt) (%)	86%	84%	84%	90%	101%	108%	95%	102%
<b>PENDAPATAN (Rp 000)</b>								
Pendapatan Penjualan Air	53,226,293	53,272,185	54,103,446	67,971,810	81,983,092	93,505,630	104,212,420	123,159,535
Pendapatan Administrasi & Sewa Meter	14,791,892	14,720,580	14,596,220	27,648,300	27,840,298	28,032,296	31,085,065	32,659,449
<b>Pendapatan Air</b>	<b>68,018,185</b>	<b>67,992,765</b>	<b>68,699,665</b>	<b>95,620,110</b>	<b>109,823,390</b>	<b>121,537,925</b>	<b>135,297,485</b>	<b>155,818,984</b>
Pendapatan Sambungan Baru	800,520	833,258	1,091,573	1,000,000	1,000,000	1,000,000	15,900,000	8,200,000
Pendapatan Operasi Non Air Lainnya	1,816,993	2,048,839	1,892,954	2,390,503	2,745,585	3,038,448	3,382,437	3,895,475
<b>Pendapatan Non Air</b>	<b>2,617,513</b>	<b>2,882,097</b>	<b>2,984,526</b>	<b>3,390,503</b>	<b>3,745,585</b>	<b>4,038,448</b>	<b>19,282,437</b>	<b>12,095,475</b>
<b>Pendapatan Air Kotor</b>	<b>16,406,440</b>	<b>16,345,767</b>	<b>16,879,806</b>	<b>20,391,543</b>	<b>24,594,928</b>	<b>28,051,689</b>	<b>31,263,726</b>	<b>36,947,860</b>
<b>Pendapatan Operasi</b>	<b>87,042,138</b>	<b>87,220,628</b>	<b>88,563,998</b>	<b>119,402,156</b>	<b>138,163,902</b>	<b>153,628,063</b>	<b>185,843,648</b>	<b>204,862,319</b>
<b>BIAYA-BIAYA (Rp 000)</b>								
Tenaga Kerja	25,750,877	28,532,508	30,213,989	32,026,828	33,948,438	35,985,344	38,144,465	40,433,133
Listrik dan Bahan Bakar	3,499,319	4,196,419	4,097,183	4,322,528	4,322,528	4,322,528	4,560,267	4,560,267
Bahan Kimia dan Bahan Pembantu	3,323,481	3,131,721	4,529,762	4,869,494	5,234,706	5,627,309	6,049,357	6,503,059
Pemeliharaan & Biaya Bahan	7,491,967	3,153,297	9,650,042	9,943,213	9,943,213	10,720,213	11,497,213	12,274,213
Administrasi & Umum	5,587,824	6,264,410	9,077,697	9,287,780	9,860,047	10,451,800	11,079,068	11,743,984
Penyisihan Piutang	6,854,137	14,497,515	3,798,721	5,437,745	6,558,647	7,480,450	8,336,994	9,852,763
Air Baku	985,721	862,498	907,736	975,816	1,049,003	1,127,678	1,212,254	1,303,173
Biaya Operasional Air Kotor	4,190,518	3,689,945	5,053,400	4,680,438	4,964,161	5,300,073	5,661,573	6,066,941
Pembelian air dari PDAM lain	0	0	0	0	0	0	26,017,200	31,693,680
<b>Biaya Operasi Tunai</b>	<b>57,683,843</b>	<b>64,328,312</b>	<b>67,328,531</b>	<b>71,543,844</b>	<b>75,880,744</b>	<b>81,015,396</b>	<b>112,558,392</b>	<b>124,431,214</b>
<b>LABA-RUGI (Rp 000)</b>								
<b>Laba Rugi Operasi</b>	<b>29,358,294</b>	<b>22,892,316</b>	<b>21,235,467</b>	<b>47,858,312</b>	<b>62,283,158</b>	<b>72,612,667</b>	<b>73,285,256</b>	<b>80,431,105</b>
Pendapatan Non Operasi	8,149,614	5,564,532	3,804,224	4,302,905	4,942,053	5,469,207	6,088,387	7,011,854
Biaya Non Operasi	(5,957,442)	(2,993,234)	(2,209,046)	(1,073,158)	(1,138,211)	(1,215,231)	(1,688,376)	(1,866,468)
<b>Laba Rugi Sebelum Penyusutan</b>	<b>31,550,466</b>	<b>25,463,614</b>	<b>22,830,645</b>	<b>51,088,059</b>	<b>66,087,000</b>	<b>76,866,642</b>	<b>77,685,267</b>	<b>85,576,491</b>
Biaya Penyusutan	8,638,222	8,619,853	8,043,918	8,402,329	9,011,329	9,620,329	10,345,329	11,070,329
Biaya Penyusutan - Air Kotor	0	0	0	0	0	0	0	0
<b>Laba Rugi sebelum Bunga</b>	<b>22,912,244</b>	<b>16,843,761</b>	<b>14,786,727</b>	<b>42,685,730</b>	<b>57,075,671</b>	<b>67,246,313</b>	<b>67,339,938</b>	<b>74,506,162</b>
Biaya Bunga	13,060,187	7,682,383	6,738,570	26,223,734	24,038,423	21,853,112	19,667,801	17,482,489
Biaya Bunga - Air Kotor	0	0	0	0	0	0	0	0
<b>Laba Rugi sebelum Pajak</b>	<b>9,852,058</b>	<b>9,161,379</b>	<b>8,048,157</b>	<b>16,461,996</b>	<b>33,037,248</b>	<b>45,393,201</b>	<b>47,672,138</b>	<b>57,023,673</b>
Pajak penghasilan badan	4,633,645	3,764,211	4,591,476	4,929,849	9,902,424	13,609,210	14,292,891	17,098,352
<b>Laba Rugi setelah Pajak</b>	<b>5,218,413</b>	<b>5,397,168</b>	<b>3,456,681</b>	<b>11,532,147</b>	<b>23,134,823</b>	<b>31,783,991</b>	<b>33,379,246</b>	<b>39,925,321</b>
<b>RETURN ON INVESTMENT (ROI)</b>								
Nilai Aktiva Tetap Rata-Rata	256,997,447	260,652,620	265,462,973	268,735,493	279,235,493	300,235,493	321,235,493	344,235,493
ROI Tahunan	2.03%	2.07%	1.30%	4.29%	8.29%	10.59%	10.39%	11.60%
ROI Rata-Rata	12.63%	13.12%	13.64%	14.26%	14.78%	15.14%	15.41%	15.73%
B. Ops./Pend. Ops. (Working Ratio) < 100%	84.81%	94.61%	98.00%	74.82%	69.09%	66.66%	83.19%	79.86%
B. Hrs Ditutup/Pend.Ops. (Operating Ratio) < 100%	123.52%	124.12%	126.21%	116.19%	108.20%	103.75%	115.94%	109.15%
Current Ratio	2.25	0.92	1.75	1.57	1.11	0.96	1.06	1.17
Ratio Hutang (Hutang Lancar + Panjang)	156.4%	154.0%	145.9%	139.0%	130.0%	117.6%	100.4%	86.0%
EBIT/Beban bunga	175.44%	219.25%	219.43%	162.78%	237.44%	307.72%	342.39%	426.18%
Laba/pendapatan air	7.7%	7.9%	5.0%	12.1%	21.1%	26.2%	24.7%	25.6%
DSC Ratio	1.75	2.19	2.19	0.81	1.11	1.37	1.43	1.66



## APPENDIX 4 – FINANCIAL STATEMENT – SOURCE AND USE OF FUND

PDAM KOTA BANDUNG								
<b>Perputaran Kas</b>								
	2003	2004	2005	2006	2007	2008	2009	2010
<b>SUMBER DANA (Rp 000)</b>								
Laba (Rugi) Bersih Sblm Dep. & Bunga Dikurangi Pajak	24,724,649	19,128,105	16,643,991	42,928,463	52,380,734	59,003,456	58,992,365	63,332,753
Laba (Rugi) Bersih Non Operasi	2,192,172	2,571,299	1,595,178	3,229,747	3,803,841	4,253,976	4,400,011	5,145,386
<b>Laba (Rugi) Bersih</b>	<b>26,916,821</b>	<b>21,699,403</b>	<b>18,239,169</b>	<b>46,158,210</b>	<b>56,184,576</b>	<b>63,257,432</b>	<b>63,392,376</b>	<b>68,478,139</b>
Uang Jaminan Pelanggan	159,653	162,860	207,910	0	900,000	800,000	15,700,000	8,000,000
<b>Total Hibah</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
Investasi Perluasan	0	0	0	0	0	0	0	0
Investasi Penyehatan	0	0	0	0	0	0	0	0
Suntikan Penyertaan oleh Pemda	0	0	0	0	0	0	0	0
Suntikan Penyertaan oleh Karyawan	0	0	0	0	0	0	0	0
Suntikan Penyertaan	0	0	0	0	0	0	0	0
Suntikan Modal Sendiri	0	0	0	0	0	0	0	0
<b>Total Modal</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Total Pinjaman &amp; Kerjasama Dgn Swasta</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
Pinjaman untuk investasi penyehatan	0	0	0	0	0	0	0	0
Pinjaman untuk investasi perluasan	0	0	0	0	0	0	0	0
Beban Bunga Masa Tenggang yang Ditangguhkan	0	0	0	0	0	0	0	0
<b>Total Sumber Dana</b>	<b>27,076,474</b>	<b>21,862,263</b>	<b>18,447,079</b>	<b>46,158,210</b>	<b>57,084,576</b>	<b>64,057,432</b>	<b>79,092,376</b>	<b>76,478,139</b>
<b>PENGUNAAN DANA (Rp 000)</b>								
Investasi Penyehatan	0	0	0	0	0	0	0	0
Investasi Perluasan	0	0	0	21,000,000	21,000,000	21,000,000	25,000,000	25,000,000
<b>Total Investasi</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>21,000,000</b>	<b>21,000,000</b>	<b>21,000,000</b>	<b>25,000,000</b>	<b>25,000,000</b>
Investasi Rutin	0	0	0	0	0	0	0	0
Beban Bunga Masa Tenggang yang Ditangguhkan	0	0	0	0	0	0	0	0
<b>Jumlah Pengeluaran Barang Modal</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>21,000,000</b>	<b>21,000,000</b>	<b>21,000,000</b>	<b>25,000,000</b>	<b>25,000,000</b>
Angsuran Pokok Pinjaman	0	0	0	26,448,943	27,316,390	27,316,390	27,316,390	27,316,390
Pembayaran Bunga	13,060,187	7,682,383	6,738,570	26,223,734	24,038,423	21,853,112	19,667,801	17,482,489
<b>Jumlah Pembayaran</b>	<b>13,060,187</b>	<b>7,682,383</b>	<b>6,738,570</b>	<b>52,672,677</b>	<b>51,354,812</b>	<b>49,169,501</b>	<b>46,984,190</b>	<b>44,798,879</b>
Modal Kerja diluar Kas	2,000,193	(7,491,618)	1,333,163	(3,966,013)	(2,001,208)	(1,259,505)	1,197,793	1,211,949
Perubahan Aktiva/Kewajiban Lain-Lain	21,082,129	8,195,155	68,080,418	(26,298,943)	150,000	150,000	2,385,000	1,230,000
Bagian Pemda Atas Laba Bersih								
Bagian Karyawan Atas Laba Bersih								
<b>Total Penggunaan Dana</b>	<b>36,142,508</b>	<b>8,385,919</b>	<b>76,152,151</b>	<b>43,407,721</b>	<b>70,503,604</b>	<b>69,059,996</b>	<b>75,566,983</b>	<b>72,240,828</b>
Kenaikan (Penurunan) Dana	(9,066,034)	13,476,344	(57,705,072)	2,750,489	(13,419,029)	(5,002,564)	3,525,393	4,237,312
<b>Saldo Kas (Awal Tahun)</b>	<b>23,292,011</b>	<b>20,071,162</b>	<b>14,172,433</b>	<b>28,743,359</b>	<b>31,493,848</b>	<b>18,074,819</b>	<b>13,072,255</b>	<b>16,597,648</b>
<b>Saldo Kas (Akhir Tahun)</b>	<b>20,071,162</b>	<b>14,172,433</b>	<b>28,743,359</b>	<b>31,493,848</b>	<b>18,074,819</b>	<b>13,072,255</b>	<b>16,597,648</b>	<b>20,834,960</b>
<b>Saldo Kas Min. yg diperlukan (2 bulan operasional)</b>	<b>11,790,672</b>	<b>12,001,782</b>	<b>12,344,517</b>	<b>20,702,753</b>	<b>21,205,926</b>	<b>21,697,483</b>	<b>26,590,430</b>	<b>28,205,015</b>
<b>Year-End Cash Balance to Minimum Cash Requirement</b>	<b>3.4</b>	<b>2.4</b>	<b>4.7</b>	<b>3.0</b>	<b>1.7</b>	<b>1.2</b>	<b>1.2</b>	<b>1.5</b>
Equity PDAM (Internal Cash Generation) Regular	0	0	0	0	0	0	0	0
Equity PDAM (Internal Cash Generation) Rescue Program	0	0	0	0	0	0	0	0



## APPENDIX 5 – SUMMARY

PDAM KOTA BANDUNG								
<b>Rencana Pemantapan Kinerja Keuangan</b>								
	2003	2004	2005	2006	2007	2008	2009	2010
<b>TARIF</b>								
Proyeksi Kenaikan Tarif	0%	0%	0%	51%	0%	15%	0%	15%
Saldo Kas Akhir (Rp 000)	20,071,162	14,172,433	28,743,359	31,493,848	18,074,819	13,072,255	16,597,648	20,834,960
Saldo Kas Akhir/Min. Kas (2 Bln Operasi)	3.4	2.4	4.7	3.0	1.7	1.2	1.2	1.5
Debt Coverage Ratio	2.2	3.0	3.2	0.9	1.2	1.5	1.6	1.8
<b>TEKNIK</b>								
Jumlah Sumbungan Akhir	143,669	143,195	143,003	144,003	145,003	146,003	161,903	170,103
Tambahan Jumlah Sumbungan	(2,285)	(474)	(192)	1,000	1,000	1,000	15,900	8,200
Optimalisasi Kapasitas	95.0%	95.0%	100.0%	100.0%	100.0%	100.0%	82.4%	79.3%
<b>MANAJEMEN</b>								
Jumlah Hari Penagihan Piutang	225	960	147	98	93	90	90	88
Jumlah Pegawai	935	935	935	935	935	935	935	935
Rasio Pegawai Per 1000 Sumbungan	7	7	7	6	6	6	6	5
<b>INVESTASI</b>								
Investasi Rutin	0	0	0	0	0	0	0	0
Investasi Pemulihan	0	0	0	21,000,000	21,000,000	21,000,000	25,000,000	25,000,000
Investasi Program Penyehatan	0	0	0	0	0	0	0	0
<b>STRUKTUR BIAYA</b>								
Tenaga Kerja	37.9%	42.0%	44.0%	33.5%	30.9%	29.6%	28.2%	25.9%
Listrik dan Bahan Bakar	5.1%	6.2%	6.0%	4.5%	3.9%	3.6%	3.4%	2.9%
Bahan Kimia dan Bahan Pembantu	4.9%	4.6%	6.6%	5.1%	4.8%	4.6%	4.5%	4.2%
Pemeliharaan & Biaya Bahan	11.0%	4.6%	14.0%	10.4%	9.1%	8.8%	8.5%	7.9%
Administrasi & Umum	8.2%	9.2%	13.2%	9.7%	9.0%	8.6%	8.2%	7.5%
Penyisihan Piutang	10.1%	21.3%	5.5%	5.7%	6.0%	6.2%	6.2%	6.3%
Air Baku	1.4%	1.3%	1.3%	1.0%	1.0%	0.9%	0.9%	0.8%
Pembelian air dari PDAM lain	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	19.2%	20.3%
<b>Biaya Langsung Usaha</b>	<b>78.6%</b>	<b>89.2%</b>	<b>90.6%</b>	<b>69.9%</b>	<b>64.6%</b>	<b>62.3%</b>	<b>79.0%</b>	<b>76.0%</b>
Depresiasi	12.7%	12.7%	11.7%	8.8%	8.2%	7.9%	7.6%	7.1%
Bunga	19.2%	11.3%	9.8%	27.4%	21.9%	18.0%	14.5%	11.2%
<b>Total Biaya Operasional</b>	<b>110.5%</b>	<b>113.2%</b>	<b>112.2%</b>	<b>106.1%</b>	<b>94.7%</b>	<b>88.2%</b>	<b>101.2%</b>	<b>94.3%</b>
Pendapatan Sumbungan Baru Dll.	3.8%	4.2%	4.3%	3.5%	3.4%	3.3%	14.3%	7.8%
<b>PENARIKAN PINJAMAN &amp; SALDO HUTANG</b>								
Pinjaman Eksisting	-	-	327,796,675	300,480,286	273,163,896	245,847,506	218,531,117	191,214,727
Pinjaman Program Penyehatan	-	-	-	-	-	-	-	-
Pinjaman Baru Lainnya	-	-	-	-	-	-	-	-
<b>PEMBAYARAN PINJAMAN EKSISTING</b>								
Pokok Pinjaman	-	-	-	27,316,390	27,316,390	27,316,390	27,316,390	27,316,390
Bunga + Jasa Bank + C. Charge	-	-	-	26,223,734	24,038,423	21,853,112	19,667,801	17,482,489
<b>Total Pembayaran</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>53,540,124</b>	<b>51,354,812</b>	<b>49,169,501</b>	<b>46,984,190</b>	<b>44,798,879</b>
<b>PEMBAYARAN TOTAL PINJAMAN</b>								
Pokok Pinjaman	-	-	-	27,316,390	27,316,390	27,316,390	27,316,390	27,316,390
Bunga + Jasa Bank + C. Charge	-	-	-	26,223,734	24,038,423	21,853,112	19,667,801	17,482,489
<b>Total Pembayaran</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>53,540,124</b>	<b>51,354,812</b>	<b>49,169,501</b>	<b>46,984,190</b>	<b>44,798,879</b>



## **ENVIRONMENTAL SERVICES PROGRAM**

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